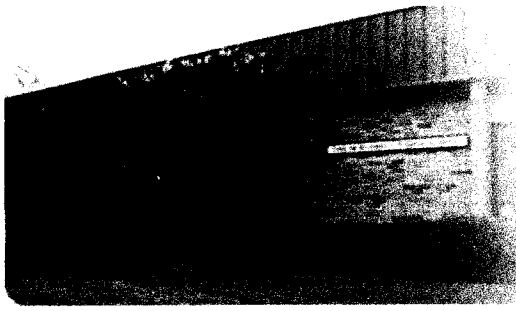

PROVIDING
COMPREHENSIVE TREATMENT
SINCE 1978

Programs & Treatment Modalities

Mold Toxicity

Household Mold | Adverse Health Effects of Indoor Molds | **Mold Mycotoxins** | Mold Assessment

MOLD MYCOTOXINS

The Effects of Toxic Molds on Personality and Brain Functioning
By Nancy A. Didriksen, Ph.D., Neuropsychologist

This sobering article by a licensed and experienced Neuropsychologist is meant to emphasize the seriousness of chronic toxic mold exposure. Mold toxicity requires proper diagnosis and appropriate treatment, since it is now being shown that mold mycotoxins can cause chronic, toxic brain injury in exposed individuals.

There are many types of brain injuries. These may occur as a result of blows to the head, gunshot wounds, accidents, strokes, sports injuries, electrical and lightning injuries, migraine headaches, vascular problems, degenerative diseases such as Alzheimer's and Parkinson's, neurological diseases such as multiple sclerosis, and from normal pressure hydrocephalus. Brain injury may also occur as a result of infectious processes such a HIV infection and AIDS, herpes simplex, Lyme disease. from a variety of brain tumors, chemotherapy, radiation therapy, oxygen deprivation, carbon monoxide poisoning, metabolic and endocrine disorders such as diabetes or hypothyroidism, and toxic conditions such as exposure to excessive amounts of alcohol, solvents, heavy metals, pesticides, and street drugs.

More recently, the effects of toxigenic molds on brain functioning are being studied. There have been numerous studies performed on other types of brain injuries and relatively few studies to date on the effects of the molds which give off toxic substances called mycotoxins.

However, from the studies that have been performed and the observations that have been made of patients who have been exposed to toxigenic molds and evaluated, a pattern of deficits is being revealed. This pattern of deficits is strikingly similar to the pattern of deficits observed in individuals who have been exposed to other neurotoxic substances, such as pesticides, solvents, and heavy metals, thereby suggesting that these molds have neurotoxic properties.

Dr. Marshall Mandell reported brain reactions, including an inability to concentrate and confusion, during testing with various mold extracts in 1976. Other studies performed, beginning in 2001, have reported chronic, toxic brain injury apparently related to exposure to toxigenic fungi. Personality changes have also been observed.

Patients being tested undergo a variety of neuropsychological and personality tests to determine exactly what areas of cognitive functioning are being affected. Deficits are found primarily on measures of higher cortical functioning (executive functions) including the ability to regulate one's behavior, plan, solve problems, reason in an abstract manner, and initiate actions.

A decline in general intellectual functioning as measured by IQ tests has also been observed. Deficits are generally on measures of information processing speed, attention and concentration, and perceptual organization. Verbal abilities are not as adversely affected.

Deficits in memory functioning are also observed, particularly in incidental memory. Incidental memory is like the memory requirements of everyday life when one is simply expected to remember information without being specifically told to recall the information. Memory for visual information is slightly more impaired than verbal memory. Overall, scores on a formal measure of memory fall close to the average for the population. However, what is important to remember is that the average educational level for the group of patients being observed is very close to a four-year college degree. Scores for college level individuals are usually

expected to be in the high-average to superior ranges on neuropsychological tests.

Overall, the majority of patients score in a mildly impaired range on the most widely used and researched neuropsychological test battery in the U.S., the Halstead-Reitan Neuropsychological Battery, despite relatively good IQ scores. Scores also suggest that brain damage is diffuse (all over the brain), rather than localized to one specific area.

Patients experience a variety of physical, psychological, and neurocognitive symptoms. The following are the most frequently reported symptoms on the Physical Symptom Checklist by patients exposed to toxigenic molds: easily fatigued, low energy, muscle weakness, trouble remaining asleep, aches and pains, sexual dysfunction, headaches, trouble falling asleep, sinus discomfort, and heart problems. The top 12 psychological symptoms include present performance inferior to prior performance or level of functioning, overwhelming exhaustion, fatigue or weariness, "this is not me", difficulty getting started in the morning, "cloudy, foggy, spacey", worry about bodily dysfunction, diminished self-confidence, tension, loss of interest in sexual activity, inability to cope well with daily or other stressors, feeling of losing control of one's life and destiny, and loss of interest in activities. The most frequently reported neurocognitive symptoms include decreased immediate and short-term memory, decreased concentration, decreased attention, difficulty remembering the names of things or people, losing words, intellectual inefficiency (hard to think), easily distracted, decreased comprehension, poorly organized ("scattered"), and losing train of thought.

Psychological and personality/behavioral functioning is also affected as indicated by the number of psychological symptoms endorsed on the checklist and by the results on personality tests. Patients exposed to toxigenic molds indicate that they are more confused and fatigued and sometimes more depressed, anxious, and angry than they were prior to the toxic exposure. They also report a reduced level of vigor and activity. However, overall they appear generally psychologically healthy, with depression, anxiety, and poor coping ability secondary to ill health which sometimes results in a disabled condition.

Those exposed to toxigenic molds also experience a variety of losses to which they must adjust, including loss of home and belongings, loss of income, loss of ability to function as they had in the past in all areas, loss of personal freedom, and loss of relationships. Exposure to toxigenic molds, like other neurotoxic substances, results in the reduction of the level of comfort, achievement, satisfaction, and effectiveness of the majority of individuals exposed.

Household Mold | Adverse Health Effects of Indoor Molds | **Mold Mycotoxins** | Mold Assessment

BACK

"We don't just get sick but are being made sick.
The age old questions, 'Why me?' and 'Why now?', do have answers."